

3.6 Utilities

Based on field inspection, water and sewer, natural gas, electric, telephone and fiber optic utilities are present in portions of the study area. Any necessary relocation of public utilities would be coordinated with the appropriate utility provider and completed without long-term interruptions in service.

3.7 Maintenance of Traffic During Construction

In accordance with the Work Zone Safety and Mobility Rule, a Transportation Management Plan (TMP) appropriate to the proposed project will be developed. The TMP will identify a set of coordinated transportation management strategies for use in managing the work zone impacts caused by the proposed project. Transportation management strategies for a work zone could include temporary traffic control measures, operational strategies such as signal retiming and traffic incident management, and public information and outreach.

The general plan for construction sequencing is to construct the interchanges prior to the closure of median openings. Temporary improvements at the US 70 intersection with Creech's Mill Road-Peedin Street will be considered to accommodate detoured traffic during interchange construction. North-south traffic utilizing US 70 Business-Peedin Street Extension or Stevens Chapel Road-Davis Mill Road would likely be interrupted during construction and off-site detours would likely be the best option for maintaining traffic during construction of the proposed bridges in these locations. Interchange ramps are expected to be partially operational prior to completion of the bridges, providing a connection to US 70. Construction sequencing is intended to minimize traffic delays and off-site detours during project construction.

4. Other Alternatives Considered

4.1 No Build Alternative

The No Build Alternative would forego any improvements to US 70 with the exception of routine maintenance. The No Build Alternative would not improve mobility of vehicular travel along US 70 or allow this portion of US 70 to function as envisioned in the referenced transportation plans. The No Build Alternative does not provide access management measures consistent with the *US 70 Access Management Study* (NCDOT July 2005) or the *US 70 Master Plan* map for Johnston County (US 70 Corridor Commission July 2009). The No Build Alternative was eliminated from further consideration because it would not meet the purpose and need for the proposed project.

4.2 Alternate Interchange Options

4.2.1 US 70 Interchange with US 70 Business-Peedin Street Extension

An alternate design (Option 2) for the US 70 interchange with US 70 Business-Peedin Street Extension was developed to address concerns raised by an adjacent business (Collins, Inc.). These concerns were related to the visibility of the business in relation to the US 70 off-ramp accessing the business. Specifically,